

Nguna Grammar

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NGUNA GRAMMAR

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by

Albert J. Schütz
University of Hawaii

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PREFACE

The first fieldwork for this study was sponsored by the University of Hawaii Research Council's Summer Research Initiation Grant, and subsequent research by National Science Foundation Grant GS-1654. The first major publication from this research was Nguna Texts (Oceanic Linguistics Special Publication No. 4), which was planned to complement the grammar. In the preface to that volume are listed the many people, especially in the New Hebrides, who assisted me during my fieldwork there.

For particular help with the grammar, I wish to thank G. B. Milner and A. Haudricourt for their comments on the earlier grammatical sketch. The present version was carefully read by Andrew K. Pawley and George W. Grace, both of whom offered many useful suggestions.

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ABBREVIATIONS

comp.	completion
excl.	exclusive
imp.	imperative
inc.	incomplete
incl.	inclusive
int.	intention
obj. mkr.	object marker
pl.	plural
prog.	progressive

NGUNA GRAMMAR

O. INTRODUCTION

O.1 Informants

My principal informant for the grammatical study, as well as for the collection of texts, was Jack Taviṃasoe. A brief sketch of his background appears in the introduction to the Texts. Unless otherwise indicated, the texts were recorded by Mr. Taviṃasoe. But one morning, armed with tape recorder (Uher 4000 Report L) and camera, we made our way into the bush and up a Land Rover track to the village of Farealapa. Arrangements had been made to record Marivurai there, and we found him freshly shaved and waiting to tell some stories from "before," the Nguna-English equivalent of "pre-contact." Born in 1891, Marivurai is the grandson of the *munuai vaau*, the new (and last) diviner, who figures in some of the texts. He is considered by the Nguna people to be one of the few old men left who know some of the older stories. But even though a few of his stories were recorded, it may be that the job was done too late. Mrs. Murray, who heard part of the tape, was surprised that his delivery and style had deteriorated so since she had last heard him speak. To add to the difficulty of dealing with this kind of recorded material, Marivurai's style was much less formal than Mr. Taviṃasoe's, and the number of what I consider elisions produce some constructions that do not appear elsewhere in the texts. At present, the grammar does not account for these, particularly the elision of verbal-pronoun markers.

Phillip Rarua provided most of the information about the Tongoa language that is compared with Nguna. He was born in 1943, and attended the Teacher Training Institute, Kawenu College (in Vila), and Moray House of the College of Education in Edinburgh. Robert Kalosava, born in 1940 in Panita, gave additional data for Tongoa.

From the North Pentecost, George Palmer (age 25, from Abwatuntora) and Simon Sihevi (age 19, from Abwatunbuliva) were interviewed. The object of these interviews was to collect data for the comparative problem of morphophonemic alternation of certain initial consonants. For the same problem in one of the Epi languages, Dick Ora (born in Moriu in 1942), a student at Kawenu College, was interviewed.

0.2 Field Methods

The investigation in the field began with eliciting from the Swadesh 200-word list and an additional list used previously for a Fijian dialect study. Responses like *warua* or *ɸarua* for 'big', and *vevee* or *pevee* for 'count', led almost immediately to the examination of some pairs of consonants to find examples of contrast.¹ The first hypothesis was that these pairs were in complementary distribution, and that their distribution was phonologically conditioned. Later, an attempt was made to show that there was still no phonological contrast, but that the conditioning was grammatical, rather a heretical notion. Searching for this kind of evidence continued through other phases of the

investigation, in fact, into the second year, during which the most persistent problem--[d] and [t̥]--was studied in depth.

An attempt was made to solve the problem of phonetically long vs. short vowels by putting questionable items in a list of nonsuspicious forms, but for some words, no satisfactory solution has yet been found. The use of citation forms has not been adequate, since position within the intonational phrase seems to alter the length of vowels for some forms.²

The first grammatical sketch included a phonology and a phrase structure, but no description of larger units. The study of these larger units began with the texts. After the text transcription and translation, cards were made for new lexical items, and any questions about constructions were listed for the following morning's eliciting. The discussion of these problems with the informant and the eliciting of similar structures made it possible for the grammatical statements eventually to apply to more of the language than the closed set of texts.

As the study of larger units progressed, it became apparent that the tools of immediate constituent analysis were cumbersome for the description of certain phenomena, embedded phrases in particular. It was during the first few weeks of the second field trip that the idea of using transformations began. A grammatical card file was organized into such categories as attribution and embedded phrases. During the summer and the next year, the use of transformations was expanded to include more categories and finally to

replace many sections of the earlier phrase structure, most particularly the long list of noun phrase markers (prepositions), and both noun and verb attributes.

0.3 Dialect variation

Nguna, or Montague Island, lies about six miles off the northwest coast of Efate in the Central New Hebrides. Its inhabitants number just under 800,³ but those people born on Nguna and now living on other islands, especially Efate, would raise the number of speakers of the language to perhaps a thousand. A form of speech similar enough to Nguna to be called the "same language" is spoken on the nearby islands of Pele, Emau, Tongoa, parts of North Efate, and the west side of Emae.

Within this area, dialect variation is relatively slight. Capell has, of course, surveyed the area,⁴ but a more detailed survey remains to be done. Even on Nguna there is some variation. The informant, whose English is unencumbered by the perpetually misleading term "dialect," says that the language of the inland people differs slightly from his coastal variety. He guessed that earlier, the language of each village was even more different from those of the others, but that some leveling had resulted from the mission publications and the use of one variety of Nguna for mission work. The differences recalled are of two types. The first, lexical, involves only a few words. The other difference is in the morphophonemic alternation of a few items, discussed in §1.4.

Nonlinguistic factors, similar to those that made it possible for the language of one area in Fiji to become the lingua franca for the entire group, have never existed in the New Hebrides. Because of the curious political system, the official language for the group may eventually be English, French, or Pidgin English. Even so, because of its place in Church literature, Nguna was one of the languages proposed in 1966 as a medium for radio broadcasting.

O.4 Previous studies

When the Reverend Peter Milne arrived at Nguna in 1870, he made use of the Reverend James Cosh's notebook "containing notes on the structure of the language, the declensions of some words, and the conjugation of verbs."⁵ Aside from his translation work, Milne's main contribution to the description of the language was his development of the orthography. Although he shared his contemporaries' fault of ignoring most of the distinctions between long and short vowels, he showed insight similar to that of the earliest Fijian missionaries in recognizing that certain complex consonants operated as units rather than as clusters. His decision was not without opposition. The Bible Society objected to having to make extra type for \tilde{p} and \tilde{m} . Milne threatened to withdraw his manuscript, and the Society gave in. Milne wrote back saying "that it was all very good to say that they held me in high regard, but it was evident that they did not care an \tilde{m} for me."⁶

Sometime before 1885, a reading book printed in Sydney fell into the hands of R. H. Codrington. In his survey⁷ he reproduced a nine-line translation of the Parable of the Sower and added etymological and grammatical notes. The orthography did not indicate long vowels, and since the complex consonants were not marked, it must have been produced before Milne's orthography had been fully developed. In addition, there seems to be an arbitrary use of *p* and *b*, and *d* is not written, as it is in the present system. Codrington remarked that the symbol *g* represented two distinct sounds, but unless there has been a major change in the sound system, he was wrong.

Codrington stated that Nguna showed a close resemblance to Sesake and Efate, and he included a grammatical sketch of the latter, compiled from an 1877 translation of St. Luke.⁸ Initial consonant alternation was noted briefly,⁹ and the complex consonants were also distinguished.

When Sydney H. Ray began his study of Melanesian languages in 1887,¹⁰ he produced a ten-page grammatical sketch of Nguna, based on translations of the Gospels of St. Matthew and St. John, for comparison with Codrington's Melanesian Languages. The table of contents, which did not change for his fuller Nguna sketch in 1926, strikes the reader as being a product of its time: (1) Alphabet, (2) Article, (3) Nouns, (4) Pronouns, (5) Possessives, (6) Adjectives, (7) Verbs, (8) Adverbs, (9) Prepositions, (10) Conjunctions, (11) Numerals, and (12) Exclamations. One is mildly envious of a period of linguistics offering a single indisputable descriptive model. Ray's grammar is, of course, an informal--and traditional--discussion of

some features of the language's grammatical system. But one of the surprising things about his sketches, considering the time at which they were written, the large number of sketches he did, and the limited material on which they were based, is that they are rather good. They are most accurate and complete in the area of morphology. The greatest limitations of his Nguna studies are the treatments of phonology (understandable, since he had to rely on written materials and reports of nonprofessionals), consonant alternation, and syntax, about which he said very little at all.

Although D. Macdonald did not write directly about Nguna, he undoubtedly knew much about the language and particularly about the various languages on Efate.¹¹ His unfortunate choice of a thesis, however, obscured much of this information, and today the reader is hampered by Macdonald's Semitic-origin bias and his inadequate labeling of dialect forms.

More recently, the Reverend Graham Miller described some features of Tongoa grammar in a fifteen-page sketch.¹² His description is hindered not so much by its format as by his incorrect analysis of a number of points, particularly morphophonemic base forms, alternation between *ni* and *ki*, and the intonation system.

Of considerable importance to the linguistic study of this area would be the comparative grammar of Epi and the Tongoa-Nguna-Efate group, promised by Capell.¹³

1. PHONOLOGY

1.1 Intonation

Intonation contours are distinguished by changes among three pitch levels. Near the end of each contour (determined by pause), the pitch may rise to level /3/, stay at level /2/ (starting point), or rise to level /3/ and drop to level /1/. Since the rise to level /3/ can occur at one of two possible points, the following contours are distinguished by the use of three numbers.

- (1) /223/ ²*ma*²*so*³*so* 'today'
 ²*la**ko*²*la*³*ko* man's name

This pattern regularly accompanies a time phrase at the beginning of a sentence (as in the first example) and is a possible contour for an appositive subject (as in the second).

- (2) /233/ ²*e ga woo* ³*pa*³*no* 'Will he go?'

This contour marks a question that does not use an interrogative substitute, or *kite* question marker.

- (3) /222/ ²*nae* 'he'

This contour marks an appositive subject.

The first example above is a sentence-introducing conjunction, the second, the copulative verb, is followed directly by a noun phrase, and the third is an appositive subject.

- (4) /231/ ²*e ga woo* ³*la*¹*ki* 'She'll marry.'
 ²*eu paki* ³*vi* ¹*la* 'They went to Vila.'

This contour marks the end of a sentence that ends with a two-syllable word. The sentence may be a statement, or a question with an interrogative substitute like *nasava* 'what?'. Its meaning is the same as that of the following.

- (5) /2311/ ²*natua* ³*wa*¹*i*¹*na* 'that year'
 ²*e* *taa* ³*pa*¹*ru*¹*a* 'It's not big.'

This contour marks the end of a sentence that ends with a word of three or more syllables.

Isolated forms, given as "words," are accompanied by patterns (4) and (5). This accounts for earlier statements of antepenultimate accent or stress.¹⁴

1.2 Syllable structure

The clearest syllable types are exemplified by such words as *a.so* 'burn' and *e.ro* 'they-two', in which the syllables are V and CV. Sequences of two like or unlike vowels are interpreted as representing two syllables. A priori, such sequences could have been interpreted in several ways:

(1) A complex nucleus. This solution seems uneconomical, since four semivowels would have to be set up to deal with such contrasts as *ae* and *ai*, *au* and *ao*.

(2) A simple nucleus plus a coda. This interpretation seems unlikely because of structural pressure. For the non-suspicious data, syllables are always open, discounting the phonetic realization of certain CV sequences as long consonants.

(3) Two syllables. Although not entirely satisfactory, this solution is the simplest.¹⁵ Its chief fault is that it seems to be at variance, especially in fast speech, with one's impression of the number of phonetic syllables uttered. (This is not an uncommon problem in the description of Oceanic languages.) In addition, the nature of the syllable is not defined explicitly. If we posit a syllable-peak system, that is, the number of syllables equal to the number of syllable peaks, we find double vowels under certain intonation conditions exhibiting only one peak. Defining the system as a duration type would not be any more satisfactory; vowels with higher pitch are sometimes longer than low pitched ones, and double vowels do not last as long as two CV syllables.

In spite of the drawbacks to solution (3), there are patterns in the language that give it support. A number of bases of the shape CVCV show reduplication of the first syllable:

<i>loloso</i>	'swim'	<i>kakati</i>	'hot, spicy'
<i>tuturi</i>	'sew'	<i>kokoro</i>	'shut'
<i>totomi</i>	'love'		

Bases with CV₁V₂ reduplicate only the CV₁:

<i>napopouru</i>	'cloud'
<i>liliu</i>	'return'
<i>memeu</i>	'wet'

Similarly, bases with CV₁V₁ (that is, with a vowel that is phonetically long) reduplicate only the CV₁:

<i>vuvuuri</i>	'stick'
<i>vevee</i>	'read, count'

1.3 Segmental phonemes

There are eighteen segmental phonemes in Nguna, represented as follows:

Consonants			
	labial	dental	velar
stops	p ɸ̃	t	k
spirants	v	s	
nasals	m ɱ̃	n	g
lateral		l	
glides	w	r	

Vowels			
	front	central	back
high	i		u
mid	e		o
low		a	

Chart 1

1.3.1 Consonants

/p/ is a lightly aspirated lenis voiceless bilabial stop. It occurs as the single element of a syllable onset--as do all consonants--and only in that position. The restrictions on the occurrence of /p/ are morphophonemic and are discussed in §1.4.

/t/ is an apico-dental stop, sometimes palatalized before /i/ and /e/, as in [t͡ɕeʌ] /tea/ 'one, person'. Voicing is not significant, but [t̪] and [d̪] are in free fluctuation, except in those environments described for the morphophonemic alternation between certain consonant pairs. It was found, however, that [d̪] is more likely to occur in the following environments:

- (1) after double vowels: *naati* 'banana';
- (2) in a syllable adjacent to one containing /l/ or /r/: *mitiri* 'write';
- (3) in partially reduplicated forms, e.g., *totomi* 'love', *mitotoa* 'thinking', *ateata* 'their', both instances of /t/ are voiced.

For all the examples above, /t/ is realized as [d̪]. In those environments, however, a voiceless allophone of /t/ occurs if the following vowel is /u/, as in *kuutu* 'louse', *tuturi* 'sew'. Also, double vowels created by morphological boundaries do not condition a [d̪]; *na-atañoli* 'person' has not been heard with a voiced /t/.

In the dictionary work, a (spelling) minimal pair for *t* and *d* was elicited: *Tamata*, man's name, and *tamada* 'their father'. When shown the written words one at a time, the informant pronounced them alike--with a voiceless, unaspirated, apico-dental stop. When asked to identify which of the two forms I said, he replied, "Both."

Tongoa, a closely-related language, has [nd̪] corresponding to Nguna (written) *d* and [t̪] to *t*. Since the Tongoa sounds are phonetically less similar and less likely to coalesce than [d̪] and [t̪], it was thought that the distribution might be described more accurately, giving some insight into the problem of the distribution

of [d̥] and [t̥] in Nguna. From the Nguna glossary, 179 words with *t* and *d* were selected, and 161 of these had cognates in Tongoa. The experiment had an unexpected result--no complementation, but instead, a minimal pair was found: Tongoa /nataada/ 'their friend' and /nadada/ 'their blood'.¹⁶

The comparative results, of course, should not influence the interpretation of a descriptive problem. But they do allow us to make some guesses about the development of the present Nguna system. Prenasalization, rather than voicing, may have been a distinctive feature in an earlier form of the language. This is supported by Ray's statement that "*d* is *nd* sometimes with *r*."¹⁷ There has been a loss of this feature in Nguna, and */d/ and */t/ have fallen together. Their status now as allophones, and the retention of the pattern of morphophonemic alternation, as described in §1.4, have produced an unusual feature in the description of their distribution: in addition to some degree of complementation and free fluctuation, non-phonological features account for the choice between [t̥] and [d̥].

/k/ is a voiceless, lightly aspirated dorso-velar stop. Heavier aspiration occurs as the phonetic realization of a following voiceless vowel. Variation in the placement of /k/ is conditioned by the relative advancement of adjacent vowels.

/p̥/ is a bilabial lenis implosive stop with varying degrees of labialization. The labialization is almost unnoticed before /o/ and /a/, but prominent enough before /i/ and /e/ to give rise to earlier interpretations of the consonant as a compound of *gbw*, *kw*, *kp*, *gw*, and *pw*.¹⁸ The implosive nature of the

sound was missed in earlier reports. The earliest analyst, Milne, realized that it operated as a single unit and, over strong objections from the Bible Society, wrote it as \tilde{p} , which remains in the present orthography.¹⁹ Milne described the sound as being preceded by k . Much later, Voegelin and Voegelin listed it as b^w , apparently interpreting the labialization as one of the main characteristics of the sound.²⁰ Some Europeans in the area who use the place name \tilde{Pele} reinterpret the sound as pw . Others (see Capell's spelling $Pe\tilde{le}$ ²¹) ignore the distinction between $/\tilde{p}/$ and $/p/$.

$/v/$ is a labial-dental spirant with some bilabial constriction. Voicing is not significant; the sound occurs more often as $[f]$.

$/s/$ is a voiceless apico-alveolar groove spirant.

$/m/$, $/n/$, and $/g/$ $[\eta]$ are voiced nasals at the bilabial, apico-dental, and dorso-velar positions.

$/\tilde{m}/$ is a bilabial nasal with dorso-velar constriction so that the sound is similar to that produced by a co-articulated $[\eta]$ and $[m]$.

Milne described it as "being preceded by the semi-vocal sound ng"²² But he wisely chose to write it \tilde{m} , rather than ngm , as was suggested to him. Ray²³ calls it ngm , and Voegelin and Voegelin write it as m^w .²⁴

$/l/$ is a voiced apico-dental lateral.

$/r/$ is, for some speakers, a retroflex vocoid. Other speakers use a lenis alveolar flap.

The following words show contrasts among twelve of the thirteen consonants. The omission is for the /p v/ contrast, discussed in §1.4.

<i>vau</i>	'weave'	<i>nagaau</i>	tree sp.
<i>tau</i>	'bear (fruit)'	<i>nañau</i>	'feather'
<i>nakau</i>	'tree'	<i>elau</i>	'beach'
<i>ṗau wono</i>	'stupid'	<i>varau</i>	'long'
<i>sau</i>	'blow (wind)'	<i>wauwa</i>	'pillow'
<i>mau</i>	particle for emphasis	<i>kinau</i>	'I'

1.3.2 Vowels

The vowels, as shown in Chart 1, occur in a 2 + 2 + 1 arrangement, with unrounded vowels at the front and central positions, and rounded vowels at the back. The lower vowels, /e a o/, are raised in the environment of the higher vowels, /i e/, and all vowels are centralized in word-final position. The range of allophones for /a/ is greatest, occurring as high as [ə] in the first syllable of *nasava* 'what?'. In *nalakiana* 'marriage', the /a/ in the penultimate syllable is raised and fronted because of the preceding /i/.

In faster (normal) speech, /i/ and /u/ occur voiceless after /p s k/. Examples are *tuusi tapu* [t̪u's̪t̪apU] 'Bible', *Leituku* [lei̯t̪ukU] woman's name, and *paki Vila* [pak̪iʔilʌ] 'go to Vila'.

/g/ followed by some vowels in final position becomes [ŋ']. The process is regular when the vowel is /i/; examples are *ṣoogi wia* [po'ŋ'wiʌ] 'good night' and *ragi* [raŋ'] 'time'. In faster speech, *maaga*, plural marker, appears as [ma'ŋ']. *-gu* 'my' often occurs as [ŋ'].

So far, only one example of /ni/ becoming [n'] has been noticed, in *manitua* 'flying fox'. These phenomena are often exaggerated in singing, where a word like *maaga* can be interpreted as one syllable rather than distort the rhythm.

Any two-vowel combination can occur, including that of two like vowels. The makers of the orthography ran afoul of these long or doubled vowels, as did so many of their contemporaries working with Austronesian languages. Even in recent times, the issue was discussed and was resolved to an end somewhat less than satisfactory. Although it was decided that there was no need to write both long vowels and double vowels, in some cases neither is marked. In many cases, the omission is understandable; the difference is hard to hear. Those that are marked fall into two categories:

(1) Two identical vowels that occur together across obvious morpheme boundaries. The largest number of these occur with the noun-forming affix *na*. . . *ana*. For example, *na-lega-ana* 'song', *na-atae-ana* 'knowledge'.

(2) A common minimal pair that needs to be distinguished. For example, *laapa* 'many' and *lapa* 'main' are written differently. But other pairs, like *nawa* 'vein' and *nawaa* 'fruit', are not.

Double vowels are most clearly distinguishable when there is a change in pitch levels between the two. In other positions, particularly during faster speech, they are hard to distinguish, at times even for the informant. They appear to last less than twice the duration of a single vowel.

Chart 2 shows examples for all possible two-vowel combinations.

	i	e	a	o	u
i	<i>tiiko</i> 'walking stick'	<i>tie</i> 'nudge'	<i>wia</i> 'good'	<i>io</i> 'yes'	<i>naniu</i> 'coconut'
e	<i>sei</i> 'who'	<i>leesi</i> 'papaya'	<i>tea</i> 'one'	<i>leo</i> 'look'	<i>memeu</i> 'wet'
a	<i>ai</i> 'alas'	<i>ae</i> 'maybe'	<i>maa</i> 'also'	<i>aao</i> 'lizard' (sp.)	<i>au</i> 'me'
o	<i>toitoi</i> 'jealous'	<i>nogoe</i> 'that'	<i>toa</i> 'fowl'	<i>toovi</i> 'press'	<i>namarourou</i> 'lake'
u	<i>sui</i> 'blow'	<i>pue</i> 'to water'	<i>sua</i> 'completed'	<i>puoli</i> 'lost'	<i>nasuu</i> 'ridge pole'

Chart 2

The following pairs show contrasts between some single and double vowels.

<i>kolopu</i>	'forearm'	<i>loopu</i>	'bamboo'
<i>vau</i>	'weave'	<i>vaau</i>	'new'
<i>vusa</i>	'unripe'	<i>vuusa</i>	'dumb'
<i>e pei</i>	'it is'	<i>epee</i>	exclamation at new sight
<i>e kiki</i>	'It (insect) is making noise.'	<i>e kiiki</i>	'It's small.'

1.4 Morphophonemic alternation of initial consonants

Four pairs of consonants show word-initial alternation: *v*, *p*; *w*, *ṽ*; *k*, *g*; and *r*, *t*. The second of each pair occurs under the following conditions:

(1) Directly after all of the set of verbal-pronoun markers:

<u>Base</u>		<u>Secondary Form</u>	
<i>vano</i>	'go'	<i>e pano</i>	'He goes.'
<i>warua</i>	'big'	<i>eu ṽarua</i>	'They're big.'
<i>kani</i>	'eat'	<i>a ganikani</i>	'I eat.'
<i>rogo</i>	'hear'	<i>ku togo</i>	'You hear.'

(2) Within this construction, any tense or aspect marker can be inserted between the verbal-pronoun marker and the verb, except *ṽa* imperative, *ga* intentional, and *pe* 'if', which require the base form.

<i>ṽa vano</i>	'Go!'
<i>a ga vano</i>	'I'm going.'
<i>e pe vano</i>	'if he goes'

Transformed verb phrases modifying nouns (§3.2.1.2.1) take the base form; those modifying verbs take the secondary form.

The voiceless and voiced allophones of /t/ pattern like the above pairs of consonants, with [d] occurring as the secondary form.

Some bases with *k-* do not change to *g-*, for example:

<i>e kiiki</i>	'It's small.'
<i>e kasua</i>	'It's strong.'

2. PHRASE STRUCTURE

The model for the phrase structure of the grammar is based partially on that used by Biggs (1961) and Carroll (1965). There was an attempt made to describe the structure of a general phrase, but the establishing of noun phrases and verb phrases seemed to make the description simpler.

The blackest box of this part of the presentation is the incomplete analysis of some derived forms occurring as noun and verb nuclei. Derivatives with frequently recurring affixes are simple enough to analyze. For example, the causative prefix *vaka-* recurs regularly enough to be immediately recognizable. Other forms, particularly one-syllable ones, are not so easily identified in a language in which the relatively low number of phonemic contrasts can produce a great deal of homophony. Until more lexicon is collected, there will occur in the texts and in the examples in the grammar some forms that should be hyphenated (that is, analyzed into more than one morpheme) and are not.

In addition to those containing unidentified morphemes, some combinations remain unhyphenated in the texts and in the citations in the grammar. Examples of these are reduplicated forms, and the pronoun sets, which appear in the grammar in paradigms. The latter await further analysis.

2.1 Verb phrase

The beginning of the verb phrase is signaled by any of the verbal-pronoun markers,²⁵ and the end by phrase-closing intonation or the onset of another phrase. Of the elements within the verb phrase, the only obligatory ones are the nucleus and the verbal-pronoun markers (except *ku*, *teku*, which can be replaced by *ṣa*). An example of the simplest kind of verb phrase, using only these obligatory elements, is:

e munu 'He drinks.'
he drink

In the following discussion, contrasts between this kind of phrase and any with additional particles will be shown when possible. For most of the particles, an example with the nucleus *munu* 'drink' will be used in addition to the other examples, giving a spread-out paradigm. *Munu* is used since it can occur in both intransitive and transitive constructions. For the examples from *Nguna Texts*, a reference to the text number and line number follows (e.g., T29:79).

The following list shows the order of occurrence of elements in the verb phrase. Within each group, the members are mutually exclusive.

- (1) Verbal-pronoun markers
- (2) Imperfective
- (3) Completion and tense
- (4) Negative
- (5) Sequential
- (6) Progressive
- (7) Nucleus
- (8) Object marker

- (9) Completion
- (10) Object
- (11) Ablative
- (12) Limiting I
- (13) Limiting II

2.1.1 Verbal-pronoun markers

Person	Singular	Dual	Plural	
1	(<i>t</i>) <i>a</i>	<i>toro</i> (<i>t</i>) <i>aro</i>	<i>tu</i> (<i>t</i>) <i>au</i>	inclusive exclusive
2	(<i>te</i>) <i>ku</i>	<i>koro</i>	<i>ku</i>	
3	(<i>t</i>) <i>e</i>	(<i>t</i>) <i>ero</i>	(<i>t</i>) <i>eu</i> , (<i>t</i>) <i>ou</i>	

Parentheses indicate optional elements. There seems to be no difference between the members of pairs like *te* and *e*. (*T*)*ou* for third person plural is used mainly in inland villages, but the coastal people occasionally use this form.

With (*t*)*eu* and (*t*)*au*, one morphophonemic change is noted. *Umai* 'come' becomes *rumai* when used directly after these markers. The *r* was not added for any other verbs checked beginning with *u-*.

2.1.2 Imperfective and conditional

ṽa is used for imperatives and conditional or incomplete action. It replaces (*te*)*ku* and is the exception noted in §2.1.

<i>ṽa</i>	<i>munu</i>	'Drink!'
imp.	drink	
<i>ṽa</i>	<i>va-ki</i>	<i>e-sava</i> 'Where are you going?'
imp.	go-to	where

ku tatagovi au noai naga ɸa munu
 you ask me water that imp. drink
 'You asked me for water that you might drink.'

Ga marks intention. Whenever it is used, the action referred to by the verb has definitely not been completed. *Ga* can occur without *woo*, future, but *woo* cannot occur unless *ga* or *ɸa* is present.

a ga munu 'I'll drink.'
 I int. drink
a ga woo munu 'I'll (definitely) drink.'
 I int. will drink
naga na-anoai ɸota sikai e ga taa
 that male other one he int. not
piragi a 'so that another man might not
 take her

take her' (T 24:30)

e mari-saa suasua naga na-goroi ni
 it unable allow that female of
na-toko-ana ɸota e ga laki pa-ki
 village other she int. marry to
na-toko-ana ɸota 'It wouldn't allow a girl
 village other
 from one village to marry [someone from] another
 village.'

Pe 'if, might'

a pe woo munu 'if I drink/I might drink'
 I if will drink
ku pe tua au naati 'if you give me
 you if give me banana
 bananas'

2.1.3 Completion and tense

Ko 'still, yet (with negative)', incomplete

a ko taa munu 'I didn't drink yet.'
 I inc. not drink

waina na-wii e ko pusa 'when the yams
 when yam it inc. unripe
 are still unripe' (T 29:79)

e ko taa paataka ni na-laki-ana 'She's
 she inc. not enough for marriage
 still not old enough for marriage.' (T 24:14)

ero ga ko too leo-paraatiki nia
 they-two int. inc. prog. look-after her
 'They'll still look after her.' (T 24:23)

matamai a ga ko pa-ki vila 'Tomorrow
 tomorrow I int. inc. go-to Vila
 I'm going to Vila.'

Here, *ko* is used when the intention or determination of the action itself is not significant. In answer to the question, "Where are you going tomorrow?" we would get:

matamai a ga woo pa-ki vila 'Tomorrow
 tomorrow I int. will go-to Vila
 I'm going to Vila.'

Poo perfective

e poo munu sua 'He's drunk already.'
 he comp. drink already

a poo punusi a 'I've seen him.'
 I comp. see him

eu poo mari sokisoki sua tooko
 they comp. make prepare already seat

aneana 'They've already prepared his seat.'
 his

(T 26:47)

au poo paka-sikai maau punusi ko
 we (excl.) comp. once only see you
 'We've only seen you once.' (T 4:144)

go eu poo mari na-kani-ana 'And they've
and they comp. make meal
made a meal (already).'

Woo future

e ga woo munu 'He'll drink.'
he int. will drink

e ga woo paka-mauri ki na-vasa-ana
it int. will preserve obj. mkr. language
ni navanua 'It'll preserve the native language.'
of land

(T 31:101)

tu ga woo peani na-aleati-a via
we (incl.) int. will have day good
'We'll have good days.'

Woo must be preceded by either *ga* (intention) or
pa (imperative). As an example of the latter:

pa woo umai 'You'll come.'
imp. will come

2.1.4 Negative

Taa 'not'

e taa munu 'He didn't drink.'
he not drink

eu taa atae te na-vatuuna 'They didn't
they not know any thing
know anything.'

2.1.5 Sequential

Moro 'again, in turn'

au moro too atulaki lawo ki
 we in-turn prog. begin build obj. mkr.
district school maaga 'We, in turn, were
 " " pl.

beginning to build District Schools.'

e moro tape na-wosi-ana pōta 'He, in
 he in-turn take work other
 turn, took another job.'

aro moro surata taliviri South Island
 we-two in-turn travel around South Island
 'Then we traveled around South Island.'

2.1.6 Progressive

Too indicates habitual action, or action definitely in progress.

e too munu 'He drinks (regularly).'
 he prog. drink

e too mari a 'He's doing it.'
 he prog. do it

airplane e too pa-ki togoa 'Does the
 airplane it prog. go-to Tongoa
 plane go to Tongoa (regularly)?"

e too pano 'It goes (regularly).'
 it prog. go

kinau a togo pia-kiiki sikai e too kai
 I I hear child one it prog. cry
 'I hear a child crying.' (T 13:24)

2.1.7 Verb nucleus

Classification

The verb nucleus is a content word, called a major morpheme in some descriptions, with or without affixes, that can occur directly after a verbal-pronoun

marker. Bases are classified according to their potential of occurring in intransitive constructions, transitive constructions, or either.

(1) Intransitive

An intransitive construction is one in which the verb nucleus is followed by neither an object marker nor an object. A large number of examples contain verb nuclei that were traditionally labeled as "adjectives," because of the translations:

<i>e</i>	<i>ṣia</i>	'It's good.'	<i>e</i>	<i>ṣarua</i>	'It's big.'
<i>e</i>	<i>taare</i>	'It's white.'	<i>eu</i>	<i>laapa</i>	'There are many.'

But many other nuclei enter into this construction:

<i>e</i>	<i>munu</i>	'He drank.'	<i>e</i>	<i>toko</i>	'He stayed.'
<i>e</i>	<i>pano</i>	'He went.'	<i>e</i>	<i>lega</i>	'He sang.'

One verb, *vei* 'be', forms a subclass by itself, since it must be followed by one of the subject pronouns listed in §2.2.2.3, or a noun phrase in apposition to it. Examples are:

<i>e</i>	<i>pei</i>	<i>nae</i>	'It was he.'	
it	be	he		
<i>e</i>	<i>pei</i>	<i>munuai</i>	'He was a diviner.'	
he	be	diviner		
<i>e</i>	<i>lagoro</i>	<i>pei</i>	<i>na-wota</i>	'He might be a chief.'
he	might	be	chief	

(2) Transitive

A transitive construction is one in which the verb nucleus is followed by an object marker (although it may be the allomorph \emptyset) and an object. Examples of bases that occur only under these conditions are very restricted; the following is the only one elicited so far:

e masau na 'He wants it.'
he want it

There have been no instances of *masau* occurring without an object or a phrase used as appositive to the object.

(3) Intransitive and transitive

Most bases can occur in either construction.

Examples are:

<i>e munu</i>	'He drank.'	<i>e munu-gi a</i>	'He drank it.'
<i>e pano</i>	'He went.'	<i>e pano ki (or pa-ki) vila</i>	'He went to Vila.'

Ki and *gi* above are different allomorphs of the object marker, which is discussed more fully in §2.1.8. The variation in the method of writing the different allomorphs is a partial concession to the traditional orthography and signifies very little, since no reliable way has yet been found to fix word boundaries.

The second pair of examples shows rather a different conception of "object." Since *ki* occurs in constructions like the following:

poo suru ki nia 'and put it' (T 1:35)
and put obj. mkr. it

te moro too ɸosiwosi ki niiki
he again prog. work obj. mkr. husk
'he again worked the husk' (T 1:40)

and also in those like the earlier one, which could be considered to contain a directional, it was decided to class the constructions together at this level.

Some bases fit into either intransitive or transitive constructions with the addition of certain affixes that will change their privileges of occurrence. *Vaka-*, when used as a causative, will

allow a base normally used in intransitive constructions to take an object:

e mauri 'It's alive.'
e vaka-mauri a 'He gave life to it.'

Other affixes have similar tendencies; for instance, it may be that bases with *pi-*, reciprocal, are used exclusively in intransitive constructions. The reduplication affixes with certain bases may have the same effect, as could *ma-*. This phenomenon has not been well studied, but it may be observed in some of the examples that follow.

Affixes

(1) *Pi-* reciprocal

The contrast between a base with and without the reciprocal prefix is shown by the following pair:

e tawiri a 'He married her.'
 he marry her
ero pi-tawiri 'They got married.'
 they-two marry

Other examples of contrast are:

liu 'pass' *pi-liu* 'exchange positions'
tua 'give' *pi-tua* 'share, give'

(2) *Vaka-* causative

In most cases the meaning of *vaka-* is causative. The following are examples:

<i>vura</i>	'full'	<i>vaka-vura</i>	'fill'
<i>mauri</i>	'live'	<i>vaka-mauri</i>	'save life, heal'
<i>susu</i>	'suck'	<i>vaka-susu</i>	'nurse'
<i>loaloa</i>	'dirty'	<i>vaka-loaloa</i>	'make dirty'
<i>laelae</i>	'happy'	<i>vaka-laelae</i>	'make happy'

The following are examples of other relationships:

<i>sikai</i>	'one'	<i>vaka-sikai</i>	'once'
<i>ṗiawia</i>	'good'	<i>vaka-ṗiawia</i>	'do good'
<i>matua</i>	'old, ancient'	<i>vaka-matua</i>	'teach or practice ancient customs'

More detailed information about these and other relationships will appear in the dictionary under the individual bases.

(3) *Ma-*

Ma- is one of the least productive of the affixes listed here, and because of the scarcity of examples, its function is difficult to name. A number of forms with *ma-* function as past participles (in meaning, at least), and perhaps as the only true "passive" in the language. Examples of contrast are:

aso 'cook'
ma-aso 'cooked', as in: *eu taoni a paapaa e*
ma-aso 'They cooked it until it was cooked.'
 (T 4:121)

sai 'thrust'
ma-sai 'broken through', as in: *e peani*
na-ṗau-na e ma-sai 'It has its head broken
 through.' (T 8:3)

worae 'break'
ma-worawora 'broken in pieces'

For some other forms, it is difficult to assign a meaning to the affix. It occurs with *taa*, the root for 'blood':

e ma-taa 'It bled.'

But it can also be used with the future particle:

e ga woo ma-taa 'It'll bleed.'
it int. will bleed

For neither of these examples is there a passive meaning.

It also occurs with *toko* 'stay' with no apparent change in meaning:

te ma-toko toko-ra wanogoe toko 'It stayed
it stay place that stay
in that place.'

Other examples are:

ma-koto 'broken' *ma-wosa* 'tired'
ma-salesale 'lightweight'

(4) *Ke-* ordinal marker

Ke- is prefixed to numerals to form the ordinals:

ke-rua 'second' *ke-tooʻlu* 'third'

Ke- does not occur with *sikai* 'one', but instead *veea* is used for 'first'.

(5) Reduplication

Treating reduplication as an item rather than a process necessitates setting up prefixes that show the shape of the morphemes, but not the specific phonemes that comprise them. One prefix is of the shape CV-:

e taaki nia 'He threw it out.'
he throw-out it
e too tataaki 'He (continually) throws
he prog. throw-out
(it) out.'

a tagau sa 'I hooked it.'
 I hook it

a tatagau 'I was hooking (something).'
 I hook

The second prefix is of the shape CVCV-:

e kasi a 'He wiped it.'
 he wipe it

e kasikasi 'He's wiping.'
 he wipe

e koso-mi na-niu 'He husked the
 he husk obj. mkr. coconut
 coconuts.'

a kosokoso 'I'm husking.'
 I husk

It should be noted from the examples above that the occurrence of the reduplicated forms depends upon a structural point: the absence of the object. The meaning of the verb nucleus remains the same. For many other reduplicated forms, the meaning changes. The following shows some of the several relationships between base and reduplicated base:

(a) Diminished

<i>kati</i>	'bite'	<i>katikati</i>	'bite lightly, nibble'
<i>kara-si</i>	'scrape'	<i>karakara-si</i>	'scrape lightly'
<i>karu-ti</i>	'scratch'	<i>karukaru-ti</i>	'scratch lightly'
<i>kola</i>	'call out'	<i>kolakola</i>	'call out softly'

(b) Repetitive

<i>sala</i>	'rub (once)'	<i>salasala</i>	'rub (often)'
-------------	-----------------	-----------------	---------------

Certain bases, when reduplicated, have meanings that change to a greater extent:

<i>liu</i>	'pass, surpass'	<i>liliu</i>	'return'
<i>vano</i>	'go'	<i>vanovano</i>	'travel around'
<i>vitinu</i>	'hurt'	<i>vivitinu</i>	'hot'
<i>tagia</i>	'sail'	<i>tagiagi</i>	'sail off course'

The last above is an example of a base that loses its initial consonant when preceded by CVCV-. Other examples are:

<i>taare</i>	'white'	<i>taare-are</i> ²⁶	'very white'
		<i>taliali</i> ²⁷	'slow'
		<i>pusuusu</i>	'ask'

2.1.8 Object marker

The allomorphs of the object marker are of the shape *-Ci* or \emptyset and are morphologically conditioned with respect to the verbal base. *Munu-gi a* 'drink it' illustrates the former type of allomorph; *noa e* 'tell him' shows the latter.

The placement of the hyphen in *munu-gi* shows the tentative interpretation of the *g* as part of the object marker rather than the stem. The latter interpretation would allow both forms to be predicted from the base form, but would necessitate positing a final *-k-* for probably half of all the verb bases in the language.

Ray²⁸ lists *g, k, m, n, r, s, t,* and *v* as the possible consonants for this position.

For many verbs, it is not clear whether the form consists of the base alone, or base plus object marker. These verbs end in *-Ci*, but a corresponding form without the last syllable has not been found. An

example is *vunusi* 'see'. There exists the form *vunu*, but with an unrelated meaning. Other examples are *viragi* 'bring' and *veani* 'have'. For the most part, this is a lexicographical matter, and the collection of more data should allow base forms to be decided upon.

2.1.9 Completion

Sua completion

e munu sua e 'He drank it.'
 he drink comp. it
a pano sua 'I went.'
 I go comp.

2.1.10 Object

Objects are listed in the following paradigm:

Person	Singular	Plural	
1	<i>au</i>	<i>gita</i> <i>gami</i>	inclusive exclusive
2	<i>ko</i>	<i>mu</i>	
3	<i>a, e, na, sa</i>	<i>ra</i>	

The distribution of *a* and *e* is phonologically conditioned. *E* occurs after *-a* or *-o*; *a* occurs after *-i* and *-e* (the final vowels of either a verb or *sua* are the only elements that occur directly before the object).

e gani a 'He ate it.'
 he eat it
e gani sua e 'He ate it already.'
 he eat comp. it

The choice of objects after *-u* is morphologically conditioned. Most verbs add *-e* before the object:

e sasari 'She's washing.'
she wash

e sarue suu-goro 'She's washing clothes.'
she wash clothes

e sarue a 'She washed it.'
she wash it

Other examples are *sulu* 'clean' and *suru* 'tempt, coax'.

In the data examined, *masau* 'want' is the only verb that takes *na* as an object. Others ending in *-u*, like *liu* 'pass', *vaku* 'uproot', and *kovu* 'cook', take *sa*.

After *ki*, an allomorph of the object marker, the preposition *raki* 'for', and the verbs *agi* 'belong to' and *magi* 'for', the objects undergo some morphophonemic changes that are best shown by the following paradigms:

Ki (and *raki*) + object

Person	Singular	Plural	
1	(<i>ra</i>) <i>kinau</i>	(<i>ra</i>) <i>kigita</i> (<i>ra</i>) <i>kinami</i>	inclusive exclusive
2	(<i>ra</i>) <i>kiigo</i>	(<i>ra</i>) <i>kimu</i>	
3	(<i>ra</i>) <i>kinia</i>	(<i>ra</i>) <i>kiita</i>	

Agi and *magi* + object:

Person	Singular	Plural	
1	(<i>m</i>) <i>aginau</i>	(<i>m</i>) <i>anigita</i> (<i>m</i>) <i>aginami</i>	inclusive exclusive
2	(<i>m</i>) <i>aniigo</i>	(<i>m</i>) <i>animu</i>	
3	(<i>m</i>) <i>aneana</i>	(<i>m</i>) <i>ateata</i>	

2.1.11 Ablative

The ablative indicates the place from, of, or in which. The paradigm is almost identical to that for object.

Person	Singular	Plural	
1	<i>au</i>	<i>gita</i> <i>gami</i>	inclusive exclusive
2	<i>ako</i>	<i>mu</i>	
3	<i>asa</i>	<i>ara</i>	

Examples are:

e toko ako 'It's up to you.'
it stay you

e one au one naga a ga mari a 'It's
it lie me lie that I int. do it
required of me that I do it.'

e one asa one 'It's required of him.'
it lie him lie

ero ga toko asa 'They'll stay in it.'
they-two int. stay in-it

na-ata tapu e toko asa 'A sacred person
person sacred he stay in-it
lives in it.' (T 8:7)

eu ga woo sari a asa 'They'll
they int. will strain it in-it
strain it in it.' (T 6:42)

au mari na-koau asa 'We make pudding from
we make pudding of-it
it.' (T 29:27)

a noa ki sua e asa 'I already
I tell obj. mkr. comp. him of-it
told him about it.'

2.1.12 Limiting I

Maau 'only'

e toolu maau 'only three'
it three only

e piisa maau 'only a few'
it few only

e taa pei sikai maau mau 'It wasn't
it not be one only at-all
just one at all.'

2.1.13 Limiting II

Mau 'at all'

a taa pano mau 'I didn't go at all.'
I not go at-all

e taa pei sikai maau mau 'It wasn't just
it not be one only at-all
one at all.'

2.2 Noun phrase

A noun phrase contains an obligatory nucleus and an optional periphery. Part of this periphery may precede the nucleus and thus signal the beginning of the phrase, but because of the optional nature of the periphery, the nucleus itself may begin the phrase. In the same way, the end of the phrase may be marked by one of the members of the post-nucleus order classes, the nucleus itself if there is no periphery following, or one of the preceding two conditions accompanied by any of the phrase-closing intonation patterns described in §1.1. Intonational clues are, however, a tenuous means of determining the borders of grammatical phrases.

Some intonational phrases and grammatical phrases coincide, but others seldom do. As an example of the latter, it is hard to imagine a noun followed by a genitive (prepositional) phrase occurring with two separate intonations. But this construction consists of two grammatical phrases.

The following shows the relative positions of the elements within the phrase.

1. Prepositions
2. Nucleus
3. Plural marker
4. *Maa*

2.2.1 Prepositions

(1) *Ki* and *ni* are both translated as 'of', but their difference in meaning is similar to that of *O*-particles and *A*-particles in many Polynesian languages. Described variously as alienable vs. inalienable, or birthright vs. acquired, the relationship has been more exactly defined by Buse.²⁹ In Rarotongan, *A*-particles (similar to Nguna *ki*) mark "an active, controlling relationship, while the *O*-particles mark a more passive one." Note the following pairs:

<i>na-vasa-ana</i>	<i>ki</i>	<i>suṽe</i>	'word of God'
speaking	of	God	
<i>na-vasa-ana</i>	<i>ni</i>	<i>na-vanua</i>	'language of the land'
speaking	of	land	
<i>na-vanua</i>	<i>ki</i>	<i>na-wota</i>	'land of the chief'
land	of	chief	
<i>na-vanua</i>	<i>ni</i>	<i>na-ataṽoli</i>	'land of the people'
land	of	people	

na-toko-ana *ki* *na-wota* 'village of the chief'
village of chief

na-toko-ana *ni* *guna* 'village of Nguna'
village of Nguna

(2) *Raki* 'for, for the purpose of'

raki *roara* *ateata* *maaga* 'for their gardens'
for garden their pl.

te *pa-ki* *roara* *ateata* *raki* *na-vinaga* 'She
she go-to garden their for food
sent to their garden for food.' (T 1:14)

2.2.2 Noun phrase nuclei

2.2.2.1 Single base, without affixes. In the following examples, the nucleus illustrating the type under consideration is enclosed in parentheses.

e *pei* (*varea*) 'It is the meeting
it be meeting-house
house.' (T 1:2)

e *tape* (*aali*) '(He) took the shellfish.'
he take shellfish
(T 1:28)

e *pei* (*vaatu*) 'It is a stone.'
it be stone

2.2.2.2 Base plus affix(es)

(1) *Na-* noun marker

poo *sike* *a* *taliviri* (*na-suṃa*) 'and set it
and set it around house
around the house' (T 1:79)

For most bases with which it occurs, *na-* is a fused noun marker. That is, these bases never occur without the prefix, and no other affix occurs between it and the base.

Those bases with which *na-* occurs optionally are in a minority. Some examples are:

vanua 'bounded plot of land for gardening'

na-vanua 'land, island'

suṽe 'God (Christian)'

na-suṽe 'idol'

vatuuna 'somewhere'

na-vatuuna 'thing'

The base *suṽa* 'house' (see the example above) occurs without *na-* in such constructions as *pa-ki suṽa* 'to the house' and *e-suṽa* 'at the house'.

Some bases occurring as the nucleus of a verb phrase can, with *na-* affixed, occur in noun phrases:

maligo 'be dark' *na-maligo* 'darkness'

(2) *E-* locative prefix

In the data gathered so far, only a limited number of forms with *e-* appear. They are:

e-lagi 'up' *e-lau* 'to or at the shore'

e-taku 'toward or at the back' *e-pua* 'deep'

e-tano 'down' *e-uta* 'to or at the interior, land'

e-kopu 'inside' *e-suṽa* 'to or at home'

(3) Suffixed possessives

Many bases classified semantically as body parts or kin terms, and some outside these classes but still vaguely "inalienable," take a short form of the possessive, suffixed to the base. The paradigm follows:

Person	Singular	Plural	
1	-gu	-gita -gami	inclusive exclusive
2	-ma	-mu	
3	-na	-ta	

In general, the other bases that occur with this set also occur with *ni*; the possessor does not have a controlling relationship with the thing possessed.

Some examples are:

<i>na-ṣirikia</i>	'side'	<i>tuṃa</i>	'self'
<i>matua</i>	'right side'	<i>na-worawora</i>	'tribe' (can also take full forms)
<i>na-mea</i>	'urine'	<i>na-ulu</i>	'leaf'
<i>nunu</i>	'photo-graph, image'	<i>na-taleo</i>	'voice'
<i>masiki</i>	'stay alone'	<i>matigo</i>	'grave'
<i>toro</i>	'power'	<i>na-ṣolaga</i>	'page'
<i>ṣolosi</i>	'all'	<i>na-ṣatoko</i>	'dead body'
<i>melu</i>	'shadow'	<i>kia</i>	'place, property'
<i>na-pura</i>	'husk, fiber'	<i>na-lake</i>	'foundation'
<i>araa</i>	'branch'	<i>talakea</i>	'owner'

<i>suuli</i>	'offspring and his family'	<i>na-ata</i>	'spirit'
<i>siki</i>	'alone'	<i>taa</i>	'friend'
<i>kaka</i>	'of, concern- ing'	<i>na-gisa</i>	'name'
<i>na-malo</i>	'inside'	<i>na-lova</i>	'trail left in grass'

The forms in the paradigm are also used as prefixes to a limited number of kin and kin-like terms and are preceded by *a-*. Examples are:

<i>a-na-goroi</i>	'his wife'	<i>a-na-sumami</i>	'his, her aunt'
<i>a-na-wota</i>	'her husband'	<i>a-na-tea</i>	'his, her friend'

Some forms take both prefix and suffix:

<i>a-na-tawia-na</i>	'his brother-in-law'
<i>a-gu-tawia-gu</i>	'my brother-in-law'

(4) Reduplication

Noun reduplication is an area still to be studied. What is known so far is that it does exist (forms like *na-worawora* are obviously reduplicated, since *wora* occurs in other constructions) and that sometimes meaning changes occur (illustrated by *na-malo* 'piece', *na-malomalo* 'pieces'; *na-ure* 'island', *na-ureure* 'many islands').

2.2.2.3 Substitutes

(1) Subject pronouns, figuring in the discussion of apposition in §3.6.1, are as follows:

Person	Singular	Plural	
1	<i>kinau</i>	<i>nigita</i> <i>kinami</i>	inclusive exclusive
2	<i>niigo</i>	<i>nimu</i>	
3	<i>nae</i>	<i>naara</i>	

(2) Demonstratives

<i>waia</i>	'this'	<i>wanana</i>	'that (near)'
<i>waina</i>	'that (distant)'	<i>wanogoe</i>	'before-mentioned'
<i>nogo(e)</i>	'before- mentioned'	<i>wonae</i>	'that (by addressee)'

(3) Interrogatives

<i>seve</i>	'which'	<i>seei</i>	'who'
<i>na-sava</i>	'what'		

(4) Indefinite

<i>seara</i>	'some'	<i>te</i>	'any'
<i>sara</i>	'every'		

The members of groups 2, 3, and 4 serve not only as substitutes, but also combine with bases with or without affixes to form compound noun nuclei. This is discussed in §3.3.1.

2.2.3 Plural marker

Maaga, plural, is classed as a marker because it occurs as the nucleus of neither a noun phrase nor a verb phrase.

<i>na-niu</i>	<i>maaga</i>	'coconuts'
coconut	pl.	

seei maaga 'Who (plural)?'
 who pl.

toko sara na-wosi-ana wia maaga 'in every
 in every deed good pl.
 good deed'

2.2.4 *Maa* (or *mee*) 'also' occupies the last position in the noun phrase. It never occurs as a phrase nucleus and is written as a separate particle because other items can be inserted between it and the nucleus.

na-ataṃoli maaga maa 'the men, too'
 person pl. also

kinau maa 'I, too'
 I also

3. TRANSFORMATIONS

In §2, the internal structure of basic phrases was described. The present section deals with the relationships of these phrases as they combine into sentences. First, this analysis operates on the assumption that each sentence consists of (at least) a verb phrase, and conversely, that each verb phrase, stripped of any added markers that would make it subordinate, can serve as an independent sentence. Added phrases, either noun or verb, are optional, and their inclusion is treated as a TRANSFORMATION, used here as a descriptive device. But whatever the label, the technique has worked well as a discovery procedure, showing many relationships that were not before apparent.

The organization of most of this section is based not on the forms of the transformations, but their functions. The following will be treated:

1. Conjunction
2. Attribution
3. Compounding
4. Participialization
5. Nominalization
6. Apposition

Within these major categories, it may be necessary to discuss certain forms of transformations, such as conjoining, permuting, or embedding.

In addition, another section deals with singular transformations (a form, not a function), for which certain operations are performed on a single phrase.

3.1 Conjunction

Phrases that have been expanded by conjunctions are described here by suggesting that the underlying forms of such a phrase are two or more phrases, with some items deleted and the conjunctions added. Some of the underlying phrases have not been reduced to their basic phrases, since here only the conjunction transformation is being illustrated.

3.1.1 Conjunctions joining noun phrases

Go 'and'

<i>e</i>	<i>pei</i>	<i>na-vinana</i>	}	\Rightarrow	<i>e</i>	<i>pei</i>	<i>na-vinaga</i>	<i>go</i>	<i>suu-goro</i>	'It was food and clothing.'
it	be	food								
<i>suu-goro</i>										
clothing										

Kite 'or'

<i>ni</i>	<i>na-maraki-ana</i>	}	\Rightarrow	<i>ni</i>	<i>na-maraki-ana</i>	<i>kite</i>	<i>na-toko-ana</i>	<i>aneana</i>	'of leadership or her village'	(T 25:45)
of	leadership									
<i>ni</i>	<i>na-toko-ana</i>									
of	village									
<i>aneana</i>										
her										

3.1.2 Conjunctions joining verb phrases

Poo 'and' allows the deletion of the second verbal-pronoun marker and any other pre-nucleus particles.

Go also serves as a sentence introducer. As an example of its frequency, it introduces fifteen of the forty-three sentences in Text 1. But it was found that its high frequency was a feature of the principal informant's style. Another informant used it in only six of the first one hundred sentences in Text 4.

Maa 'but'

te mari-saa melu tua ki vitariki
he unable come out from old-woman

wanogoe maa tero gona toko
before-mentioned but they-two fasten stay

'He was unable to come out from the old woman,
but they stayed fastened (together).' (T 1:43)

Mee 'but' may be interchangeable with *maa*. It did not appear frequently; the following example shows it introducing a sentence.

mee e pei na-vinaga ni ragi saa 'But it's
but it be food of time bad
a food for bad times.' (T 29:43)

Koni 'nevertheless'

koni e pano 'Nevertheless, he went.'
nevertheless he go

Kite 'or'

e pe too mari-saa-ki sara naleo
he if prog. spoil obj. mkr. every thing

sara ragi kite e pe too panoko na-goroi
every time or he if prog. steal woman

'If he would spoil everything all the time, or if
he would steal a woman' (T 27:2)

Tamata links decimals and units.

<i>rua-lima</i>	<i>sikai</i>	<i>tamate</i>	<i>sikai</i>	'eleven'
two five	one	plus	one	

3.2 Attribution

3.2.1 Attribution of noun nuclei

3.2.1.1 Noun phrases in attribution to noun nuclei are those beginning with the prepositions listed in §2.2.1.

<i>varea</i> meeting-house <i>ni togalapa</i> of Togalapa	} ⇒	<i>varea ni togalapa</i> 'meeting house of Togalapa' (T 1:2)
<i>niiki</i> husk <i>ni na-niu</i> of coconut	} ⇒	<i>niiki ni na-niu</i> 'coconut husk' (T 1:29)
<i>na-wewele</i> bed <i>ki p̃ila-na</i> of mother-his	} ⇒	<i>na-wewele ki p̃ila-na</i> 'his mother's bed' (T 1:36)
<i>na-vasua</i> piece <i>ni m̃aleoputo</i> of middle <i>ni na-koau</i> of pudding	} ⇒	<i>na-vasua ni m̃aleoputo ni na-koau wanogoe</i> 'a piece of the middle of that pudding' (T 1:23)
<i>wanogoe</i> before-mentioned		

<i>e-tano</i> under <i>ni na-wewe</i> of bed <i>ki pila-na</i> of mother-his	} \Rightarrow	<i>e-tano ni na-wewe ki</i> <i>pila-na</i> 'under his mother's bed' (T 1:35)
---	-----------------	--

For this type of attribution, the order is head-attribute.

The type of transformation exemplified above is considered to be of the embedding type, since the plural marker or other type of attributive will not follow the head directly. For example:

<i>raki na-vinaga</i> for meal <i>te ateata</i> it belong-to-them <i>ni ragi-melu</i> of afternoon	} \Rightarrow	<i>raki na-vinaga ni ragi-melu</i> <i>ateata</i> 'for their afternoon meal' (T 1:16)
---	-----------------	--

<i>tea maaga</i> one pl. <i>ni matua</i> of old	} \Rightarrow	<i>tea ni matua maaga</i> 'people of old' (T 24:3)
--	-----------------	---

<i>araa wanogoe</i> branch that <i>ni na-kosoava</i> of nakosoava	} \Rightarrow	<i>tea ni na-kosoava wanogoe</i> 'that' branch of the nakosoava tree' (T 18:9)
--	-----------------	--

<i>tea maaga</i> one pl. <i>ni na-vanua</i> of land <i>te agi-nami</i> it belong-to-us	} \Rightarrow	<i>tea ni na-vanua aginami</i> <i>maaga</i> 'inhabitants of our land'
---	-----------------	---

3.2.1.2 Verb phrases in attribution to noun nuclei

3.2.1.2.1 Embedded phrases

<i>na-wota</i> chief	}	\Rightarrow	<i>na-wota warua</i> 'high chief'
<i>e</i> <i>̃parua</i> he big			
<i>missionary</i>	}	\Rightarrow	<i>missionary wia</i> 'good missionary'
<i>e</i> <i>̃pia</i> he good			

Note in the above examples that for those verb nuclei with initial consonants that alternate morphophonemically (§1.4), the embedded nucleus takes the base form.

<i>na-ata-̃moli</i> person	}	\Rightarrow	<i>na-ata-̃moli taare</i> 'Caucasian'
<i>e</i> <i>taare</i> he white			
<i>na-kau</i> stick	}	\Rightarrow	<i>na-kau kiiki</i> 'small stick'
<i>e</i> <i>kiiki</i> it small			
<i>toa</i> fowl	}	\Rightarrow	<i>toa laapa</i> 'many fowl'
<i>eu</i> <i>laapa</i> they many			
<i>na-wosi-ana</i> work	}	\Rightarrow	<i>na-wosi-ana wia</i> 'good work'
<i>e</i> <i>̃pia</i> it good			

Multiple embedding is possible. One of the embedded phrases has the effect of intensifying the other.

<i>na-ika</i>	}	\Rightarrow	<i>na-ika wia liu</i> 'very good fish'
fish			
<i>e p̃ia</i>			
it good			
<i>e liu</i>	}	\Rightarrow	
it surpass			

The markers of possession (*agi-*, *magi-*) are treated as embedded attributes, since these forms can occur as verb nuclei.

<i>na-suṃa</i>	}	\Rightarrow	<i>na-suma aginaw</i> 'my house'
house			
<i>te aginaw</i>			
it mine			

<i>na-vinaga</i>	}	\Rightarrow	<i>na-vinaga magi Jack</i> 'food for Jack'
food			
<i>te magi Jack</i>			
it for Jack			

Numerals do not exhibit all the usual morphophonemic patterns when they enter into attribution.

<i>na-suṃa</i>	<i>eu</i>	<i>paati</i>	'There are four houses'
house	they	four	

We expect the base form *vaati* 'four' to be used when *eu paati* is embedded within the noun phrase, but there appears instead *na-suṃa paati*.

3.2.1.2.2 Conjoined phrases

Verb phrases modifying nouns are frequently introduced by *waina* 'that, which'.

na-pua + waina e too pae asa
 path that he prog. come-from it
 'path from which he comes' (T 2:19)

Some modifying verb phrases are used without a marker, although we are tempted to posit a deleted *waina*.

e peani na-ṣau-na + e ma-sai
 it have head-its it broken
 'It has a head that is broken through.' (T 8:3)

e peani na-ata-tapu + e toko asa
 it have person-sacred he stay in-it
 'It has a sacred person who lives in it.' (T 8:7)

3.2.2 Attribution of verb nuclei

3.2.2.1 Embedded phrases

The results of the embedding of one verb phrase in another were interpreted in several ways by Ray (1926). For some lexical items, the embedded phrases were labeled "adverbs." Examples follow:

<i>e ṣosiwosi</i>	}	\Rightarrow	<i>e ṣosiwosi ṣia</i>	'He works well.'
he work				
<i>e ṣia</i>				
it good				

<i>e</i>	<i>kasua</i>	}	\Rightarrow	<i>e kasua p̃ia</i>	'It was good and strong.'
it	strong				
<i>e</i>	<i>p̃ia</i>				
it	good				
<i>e</i>	<i>laki</i>	}	\Rightarrow	<i>e laki m̃araverave</i>	'She married quickly.'
she	marry				
<i>e</i>	<i>m̃araverave</i>				
it	fast				

Note first that whereas in noun attribution, the base form is used for alternating consonants, in verb attribution, the embedded nucleus uses the secondary form. Second, and particularly important for distinguishing later between attribution and compounding, note that the verbal-pronoun markers are glossed differently in the first and second items in each pair. That the marker is *e* in each case is an accident in choosing the examples. The following is also possible:

<i>eu</i>	<i>p̃osiwosi</i>	}	\Rightarrow	<i>eu p̃osiwosi p̃ia</i>	'They work well.'
they	work				
<i>e</i>	<i>p̃ia</i>				
it	good				

The *e* in the second of each pair refers to the action that has been performed. Thus, for each case of verb attribution involving embedding, the following type of transformation is possible:

<i>e</i>	<i>p̃osiwosi</i>	<i>p̃ia</i>	\Rightarrow	<i>na-wosi-ana</i>	<i>e</i>	<i>p̃ia</i>
he	work	good		work	it	good
'The work is good.'						

Since the affix *na. . .ana* has very wide applicability (§3.5.2), this frame provides a useful criterion for defining embedding attribution and distinguishing it from compounding.

A number of "verbal prepositions"³⁰ listed by Ray, and analyzed as noun phrase markers in an earlier draft of this paper, also occur as the nuclei of verb phrases. For this reason, their use with other verbs is treated here as an embedding transformation. The following example shows one item first as a nucleus, then as a transformed verb phrase that functions as an attribute.

Pisari 'beside'

e pisari au 'He's by me.'
he stay-beside

e toko pisari a 'He's staying beside him.'
he stay beside him

The optional transformation of the second sentence would be:

e toko pisari a \Rightarrow *na-toko-ana aneana*
he stay beside him staying his

e pisari a
it beside him

However, much more study of the language must be done before we admit, wholesale, sentences like the second. This one, for example, involves an idiom *na-toko-ana* 'village' and would be misunderstood.

The following list, checked with the informant, shows the "verbal prepositions" that do occur as nuclei of verb phrases and are thus capable of functioning as embedded attributes.

<i>oli</i>	'instead of'	<i>tausí</i>	'after'
<i>sikoti</i>	'with'	<i>talivirigoro</i>	'round about'
<i>toko</i>	'in, at'	<i>taṣ̃au</i>	'over'
<i>tapala</i>	'like'	<i>tĩṣ̃a</i>	'against'
<i>takiusi</i>	'like, as'	<i>sari</i>	'beside'
<i>pae</i>	'from'	<i>masale</i>	'without'
<i>melu</i>	'from, out from'	<i>pilake</i>	'accompany'

Two forms that seem similar to the members of this list but do not occur alone as verbal nuclei are *tua* 'away from' and *usuraki* 'throughout'. Examples of their use are:

ṣ̃a *va* *tua* *kinau* *pano* 'Get away from me.'
 imp. go away me go

(*Tua* takes the full form of the pronoun, rather than the object form.)

e *pano* *usuraki* *na-vanua* 'It goes throughout
 it go throughout land
 the land.'

As directionals, these forms are more similar to those like *melu* and *sari* above than to prepositions. Thus, they are added to the list while admitting that their occurrence (hypothetical) as verb nuclei has been conjured up as a descriptive convenience.

When phrases with *magi-* (like *te maginau* 'it is for me'; *te maniigo* 'it is for you') are used as attributes to verb nuclei, they occur before the nucleus.

<p> <i>ṗa</i> <i>soso</i> <i>e</i> imp. call him <i>na-ataṃoli</i> person <i>e</i> <i>taare</i> he white <i>e</i> <i>sikai</i> he one <i>e</i> <i>magi-nami</i> it for-us </p>	} ⇒	<p> <i>ṗa</i> <i>maginami</i> <i>soso</i> <i>na-ataṃoli</i> <i>taare</i> <i>sikai</i> 'Call a white man for us.' </p>
<p> <i>a</i> <i>ga</i> <i>sui</i> <i>a</i> I int. blow it <i>na-kapu</i> fire <i>e</i> <i>maniigo</i> it for-you </p>	} ⇒	<p> <i>a</i> <i>ga</i> <i>maniigo</i> <i>sui</i> <i>na-kapu</i> 'I'll blow the fire for you.' (T 1:77) </p>
<p> <i>eu</i> <i>too</i> <i>mari</i> <i>a</i> they prog. make it <i>na-vinaga</i> food <i>e</i> <i>mateata</i> it for-them </p>	} ⇒	<p> <i>eu</i> <i>too</i> <i>mateata</i> <i>mari</i> <i>navinaga</i> 'They make food for them.' (T 28:61) </p>

3.2.2.2 Conjoined phrases

One set of markers introduces verb phrases that modify other verb phrases.

Nalakena 'because'

Maa *te* *too* *tea* *nalakena* *nae* *e* *munu*
but he prog. doze because he he drink
na-maloku 'But he would doze, because he drank
kava
kava.' (T 6:10)

Ray³¹ calls *nalakena* a "noun preposition" because it seems to be derived from *na-lake* 'root, reason'. If so, *na-lake-na* would mean 'its root, reason', and it does occur with this meaning elsewhere in Text 6.

Waina 'that, which, when'

go waina eu too saisaí sara ʔoogi
and when they prog. meet every night
kusue nae e taa pasa 'And when they met
rat he he not speak
every night, Rat didn't speak.' (T 6:7)

Paapaa 'until'

poo tiʔaso-ki a pa-ki aali
and push-in obj. mkr. it to shell
wanogoe paapaa e kasua 'and pushed
before-mentioned until it tight
it into the shell until it was tight' (T 1:30)

Ni 'that, for'

e paataka ni tu ga sike
it enough for we int. choose
na-vei-na-wota-ana 'It's enough that we might
chief
choose a chief.' (T 26:27)

So far, *ni* with this function has been found following only *paataka* 'enough'. It is also used with only a pronoun following, as in *e paataka ni au* 'It's enough for me.'

Wanogoe 'that (before-mentioned)'

e pei na-aleati-a wanogoe e ga
 it be day before-mentioned she int.
va-ki na-suṃa ki na-anoai aneana 'It's the
 go-to house of male her
 day on which she'll go to her husband's house.'
 (T 24:41)

Time phrases are a subcategory of attributive phrases, marked (usually) by their position before the verbal-pronoun marker and appositive subject, if any. If it does occur immediately before the verbal-pronoun marker, a time phrase is not distinguished in any formal way from an appositive subject. In the following sentences, the first phrases of each occur with the same intonation pattern.

<i>masoso</i>	<i>a ga</i>	<i>vano</i>	'I'll go today.'
today	I int.	go	
<i>kinau</i>	<i>a ga</i>	<i>vano</i>	'I'll go.'
I	I int.	go	

The time phrase in the first sentence can, however, be switched to the end, whereas the appositive subject in the second can not.

It is probable that an example of structural ambiguity between time phrase and appositive subject would have to be very contrived indeed. Normally, time phrases use the following components:

<i>masoso</i>	'today'
<i>matamai</i>	'next day, tomorrow'
<i>nanova</i>	'yesterday'
<i>nanoasa</i>	'day before yesterday'
<i>waasa</i>	'day after tomorrow'

<i>naĩmogi</i>	used preceding a numeral; so many days hence or past
<i>matamai kinia</i>	'day after that'
<i>maliĩoogi</i>	'morning'
<i>ĩoogi</i>	'night'
<i>aleati</i>	'midday'
<i>na-aleati-a</i>	'day'
<i>ragi melu</i>	'afternoon'
<i>atelagi</i>	'month'
<i>na-malaati-ana</i>	'winter'
<i>wik</i>	'week'
<i>tuai</i>	'before'
<i>ragi</i>	'time'
<i>aura</i>	'hour'
<i>seve</i>	(<i>aura, ragi, etc.</i>) 'which hour, time?'
<i>saala</i>	(<i>veea, ke-rua, etc.</i>) 'first, second time'

Names of the days of the week, months, years, or seasons also belong to this list.

3.3 Compounding

3.3.1 Compounding of noun nuclei

The demonstratives, interrogatives, and indefinites combine with bases, with or without affixes, to produce compound noun nuclei. Examples are:

<i>na-ataĩmoli</i>	+	<i>waia</i>	\implies	<i>na-ataĩmoli waia</i>
person		this		'this person'

<i>na-wota</i>	+	<i>wanogoe</i>	\Rightarrow	<i>na-wota wanogoe</i>
chief		before-		'that chief'
		mentioned		

The normal order for this construction is content-word--function-word. But for three forms--*seve* 'which', *sara* 'every', and *te* 'any'--the order is reversed.

<i>aura</i>	+	<i>seve</i>	\Rightarrow	<i>seve aura</i>	'which
hour		which		hour?	
<i>maanu</i>	+	<i>seve</i>	\Rightarrow	<i>seve maanu</i>	'which
bird		which		bird?	(T 4:23)
<i>na-leo</i>	+	<i>sara</i>	\Rightarrow	<i>sara na-leo</i>	'everything'
thing		every			
<i>ragi</i>	+	<i>te</i>	\Rightarrow	<i>te ragi</i>	'any time'
time		any			

Natu-ta na-anoai 'their son' exemplifies another type of compounding of noun nuclei. Here, both forms are derived from bases.

3.3.2 Compounding of verb nuclei

Sequences of two or more verb nuclei that do not allow transformations of the kind described in §3.2.1.2 are considered to be the result of a compounding transformation. The form of the transformation is embedding.

<i>eu</i>	<i>pa-ki</i>	<i>asa</i>	} \Rightarrow	<i>eu pa-ki asa pano</i>
they	go-to	it		(T 17:24)
<i>eu</i>	<i>pano</i>			'They went to it.'
they	go			

<i>eu mēlu</i> they come-out	}	⇒	<i>eu mēlu pae Nguna pano</i> (T 17:35) 'They went out from Ngunā.'
<i>eu pae asa</i> they come from-it			
<i>guna</i> Ngunā			
<i>eu pano</i> they go			
<i>eu liliu sua</i> they return comp.	}	⇒	<i>eu liliu sua umai</i> (T 17:73) 'They returned.'
<i>eu rumai</i> they come			
<i>poo tape ra</i> and take them	}	⇒	<i>poo tape ra paki malo</i> <i>tapu aneana pano</i> (T 18:35) 'and took them to his sacred place'
<i>e pa-ki asa</i> he go-to it			
<i>malo</i> place			
<i>e tapu</i> it sacred			
<i>e aneana</i> it his			
<i>e pano</i> he go			

The last example, chosen for its complexity, shows how a complex phrase, itself only part of a longer sentence, is composed of six basic phrases. Illustrated here are compounding, attribution, and apposition.

The addition of *pano* 'go' to a phrase already containing some word pertaining to motion does not seem to change the meaning much. The informant said that the following sentences meant the same thing:

eu pa-ki vila
 they go-to Vila

eu pano pa-ki vila 'They went to Vila.'
 they go go-to Vila

eu pa-ki vila pano
 they go-to Vila go

Numerals above 'nine' exhibit a special kind of compounding.

rua-lima-toolu 'thirty'
 twoxfivexthree

rua-lima-sikai 'ten'
 twoxfivexone

3.4 Participialization

It was found that a form like *tea vasa-pi-seiki* 'teacher' was the result of the attribution transformation and was derived from two basic phrases:

$$\left. \begin{array}{l} \textit{tea} \\ \text{one} \\ \textit{e} \text{ } \textit{pasa-pi-seiki} \\ \text{he} \text{ } \text{teach} \end{array} \right\} \Rightarrow \textit{tea vasa-pi-seiki}$$

When this is compared with *tea vasa-pi-seiki-ana* 'student, one taught', it is seen that for the second form, the relationship between the head and the attribute is not the same as that for the preceding example. Thus, the construction cannot be said to be derived simply from two phrases, nor is it the same as the result of an attribution transformation. Instead, the nucleus here, *tea* 'one', is the recipient of the action named by the second form, the *-ana* form.

-*Ana* constructions are called here participles and are treated as the results of a participialization transformation. Examples follow.

<i>vaatu</i>	<i>veni-ana</i>	'cooking stone, stone for cooking'
stone	cook	
<i>noai</i>	<i>munu-ana</i>	'drinking water'
water	drink	
<i>toa</i>	<i>kani-ana</i>	'chicken for eating'
fowl	eat	
<i>malo</i>	<i>kani-ana</i>	'place for eating'
place	eat	

The last two forms seem to present identical structures and different meanings, since it is unlikely that one would eat a place with the same facility as a chicken. If we look for related sentences, we find that they are different. The basic phrases of *toa kani-ana* are:

e gani a
 he eat it
toa
 fowl

The transformations required are apposition, producing *e gani toa*, and partialization, producing *toa kani-ana*. The basic phrases for *malo kani-ana* are:

e ganikani asa (The reduplicated form is
 he eat in-it used when there is no object.)
malo
 place

Here, *malo* is in apposition to *asa*, the ablative, whereas *toa* was in apposition to *a*, the object.

The most common example of participialization uses *tea*, loosely translated as 'one, someone, something', and is usually translated into English as a passive.

eu pei tea tiṽaki-ana pa-ki Port Vila
they be one sent to Port Vila

'They were sent to Port Vila.'

e pei tea mari-sua-ana
it be one done-already

'It has already been done.'

e pei tea natiki-ana pa-ki na-tasi
it be one thrown to sea

'It is thrown into the sea.' (T 26:93)

e ga vei tea sasara-lua-ana
it int. be one swept-out

'It'll be swept out.' (T 6:45)

e pei tea atae-ana
it be one known

'It is known.'

e ga woo taa pei tea tomatagani-ana
it int. will not be one honored

mau
at-all

'It won't be honored at all.' (T 6:28)

For these forms, one type of basic phrase will suffice--that showing the subject above as the direct object.

3.5 Nominalization

3.5.1 Internal reduplication involves the repetition of the first vowel of a two-syllable verbal base. The common meaning can be described as vaguely instrumental. For example, *sooro* 'flame' is the means by which something is burnt (*soro*). The process is by no means regular, but before more dictionary work is completed, it will be impossible to know how many verbal bases can be nominalized in this way. A short list follows:

<i>soro</i>	'to burn with flame'	<i>sooro</i>	'flame'
<i>kokoro</i>	'to shut'	<i>kooro</i>	'enclosed pen, fish trap'
<i>toko</i>	'to stay'	<i>tooko</i>	'chiefly seat'
<i>kosomi</i>	'to husk'	<i>kooso</i>	'implement for husking'
<i>tilae</i>	'to pry'	<i>tiila</i>	'lever'
<i>tiko</i>	'to pole'	<i>tiiko</i>	'walking stick'

Some different relationships are shown by the following:

<i>torotoro</i>	'to sweat'	<i>tooro</i>	'sweat'
<i>řalugoro</i>	'to protect'	<i>waalu</i>	'enemy'
<i>manivenive</i>	'thin (as paper)'	<i>niive</i>	'fan'
<i>titi</i>	'to go fast'	<i>tiiti</i>	'flat stone that can be thrown fast'
<i>nopa</i>	'to cook with cabbage'	<i>noopa</i>	'cabbage'
<i>kovu</i>	'method of cooking'	<i>koovu</i>	'meal thus cooked'
<i>kuře</i>	'to throw'	<i>kuuře</i>	'stick for throwing'
<i>litae</i>	'to sting'	<i>liita</i>	'wasp'

<i>ṣīli</i>	'close eyes'	<i>ṣīili</i>	'blind person'
<i>sova</i>	'to cough'	<i>soova</i>	'a cough'

3.5.2 Nominalization affix

Most verb nuclei can serve as noun nuclei if they are enclosed in the discontinuous morpheme *na. . .ana*.³² For those initial consonants that alternate, the primary forms are used.

na-vei-ana 'being'

na-vei-na-wota-ana 'being a chief, office of chief'

na-malaati-ana 'cold season, winter'

na-mari-na-leo-sa-ana 'sin' (Although *saa* is
do thing bad

the base form for 'bad', it is proposed that three like vowels do not occur in sequence.)

For one form, *na-aleati-a* 'day', the shortened affix *na. . .a* occurs. It is not certain how many more examples there are, but this seems to be the same morpheme as *na. . .ana*.

The fuller form is extremely common. The following sentence, taken from one of the texts, shows rather an extreme use of the affix.

*Go au peani na-ṣōṣo-sikai-maa-ana nalakena
na-saisai-peani-ana wia pae taleva ni na-rogorogo-
ana* 'And we were in agreement because of the
good unification from the side of the Gospel.'

3.6 Apposition

Subjects, predicate nouns, objects, and ablatives named explicitly are said to be in apposition to the function word (verbal-pronoun marker or pronoun) they are equated with. Apposition of subjects involves the addition of phrases; the other types require the replacement of the object and ablative pronouns.

3.6.1 Noun phrases used as appositive subjects precede the verbal-pronoun marker (not necessarily directly; lengthy modifiers or particles may intervene), constitute a separate intonation phrase, and are not distinguished from time phrases except possibly by vocabulary.

The appositive subject and the verbal-pronoun marker agree in person, number, and inclusion.

tamata-wota tua waia + ero toko
man-with-wife two this they-two stay

varealapa
Farealapa

'A man and his wife stayed at Farealapa.' (T 1:1)

kanao ʔota sikai + te too umai
man another one he prog. come

'Another man came (continually).' (T 1:11)

lakolako + e tape aali sikai
Lakolako he take shellfish one

'Lakolako took a shellfish' (T 1:28)

kinau + a ga vano
I I int. go

'I'll go.'

The following is an example of the appositive subject separated from the basic phrase by a more lengthy modifier:

sara na-leo maaga waina eu toko uta
 every thing pl. that they stay inland
 (appositive subject) (attribute)

eu too p̃oa
 they prob. stink
 (basic phrase)

'Everything that stayed inland stank.' (T 11:47)

Naga 'that' or \emptyset (*naga* deleted?) introduces a verb phrase that can serve as an appositive subject for a particular kind of construction. Here, the appositive follows the main phrase.

e p̃ia + naga ku ga woo pano
 it good that you int. will go

'It's good that you're going.'

e p̃ia + a ga too noa karau aginau
 it good I int. prog. say axe my

'It's good that I keep saying, my axe.' (T 2:30)

3.6.2 Appositive predicate nouns occurring after *pei* 'be'

Here, the underlying forms of the construction are the *pei* verb phrase, which includes a pronoun to equate the verbal marker to, and the noun phrase used as appositive.

<i>e</i> <i>pei</i> <i>nae</i> it be it	} ⇒	<i>e</i> <i>pei</i> <i>varea</i> <i>ni</i> <i>togalapa</i> 'It was Togalapa's meeting house.' (T 1:2)
<i>varea</i>		
meeting house		
<i>ni</i> <i>togalapa</i> of Togalapa		

3.6.3 Appositive objects

§2.1.10 listed the object pronoun as a possible component of the verb phrase. In the apposition transformation, this pronoun will be deleted and replaced by a noun phrase, another verb phrase, or a sequence of phrases.

<i>e</i> <i>munu-gi</i> <i>a</i> he drink it	} ⇒	<i>e</i> <i>munu-gi</i> <i>tii</i> 'He drinks tea.'
<i>tii</i>		
tea		

<i>e</i> <i>pesi</i> <i>a</i> he dig it	} ⇒	<i>e</i> <i>pesi</i> <i>na-wora-one</i> 'He dug the sand.' (T 2:14)
<i>na-wora-one</i>		
sand		

Most verb phrases that serve as appositive objects are introduced by *naga* 'that', *mase* 'whether', or *kite* 'if'.

<i>te</i> <i>atae</i> <i>a</i> he know it	} ⇒	<i>te</i> <i>atae</i> <i>naga</i> <i>na-atañoli</i> <i>wanogoe</i> <i>e</i> <i>too</i> <i>umai</i> 'He knew that that person came.' (T 1:26)
<i>na-atañoli</i>		
person		
<i>wanogoe</i> before- mentioned		

<i>e</i> <i>too</i> <i>umai</i> he prog. come
--

<i>a taa atae a</i> I not know it	}	⇒	<i>a taa atae mase tu pe</i> <i>vano kite tu pe taa</i> <i>pano</i> 'I don't know whether we'll go or not.'
<i>tu pe vano</i> we if go			
<i>tu pe taa pano</i> we if not go			
<i>eu punusi a</i> they see it	}	⇒	<i>eu punusi kite te pei</i> <i>wootu</i> 'They saw if it was spotted.' (T 4:14)
<i>te pei wootu</i> it be spotted			
<i>e punusi a</i> he see it	}	⇒	<i>e punusi kite maanu e</i> <i>tiri</i> 'He saw that a bird flew.' (T 4:24)
<i>maanu</i> bird			
<i>e tiri</i> it fly			

A few verbs take either an appositive noun object, or a verb phrase without a marker and the verbal-pronoun marker deleted.

<i>a masau na</i> I want it	}	⇒	<i>a masau tin na-ika</i> 'I want the tinned fish.'
<i>tin na-ika</i> tin fish			
<i>a masau na</i> I want it	}	⇒	<i>a masau munu-gi</i> <i>na-maloku</i> 'I want to drink kava.'
<i>a munu-gi a</i> I drink it			
<i>na-maloku</i> kava			

Mari 'do, make' combines with verb phrases in a different manner. In *e mari punue a* 'He killed it', the object *a* is retained, while *e punue* 'He is dead' is embedded in the phrase.

3.6.4 Appositive ablative

Sentences with verbs like *noa* 'tell' or *tua* 'give' often contain what we traditionally call direct and indirect objects. Here, the indirect object is treated as an appositive to the object pronoun, and the direct object as an appositive to the ablative pronoun.

<i>te</i>	<i>too</i>	<i>tua</i>	<i>e</i>	<i>asa</i>	} ⇒	<i>te</i>	<i>too</i>	<i>tua</i>
she	prog.	give	him	of-it		<i>lakolako</i>		
<i>lakolako</i>						<i>na-tigi-na</i>		
<i>na-tigi-na</i>						'She would		
side-its						give Lakolako		
								(a piece from)
								its side.'
								(T 1:17)

Although not distinguished by any formal criteria, a set of words normally called locatives are in apposition to the ablative. The class is open, since it consists of any place name, as well as more general names such as *maleoputo* 'middle' and *na-ṗau* 'top'. Also occurring with this function are the limited number of forms with the locative prefix, listed in §2.2.2.2.

It may be possible to treat another type of noun phrase as an appositive ablative--a phrase that names. Note the following sentence:

eu soso na-wora waia ki mālaḡoa
 they call place this obj. mkr. Mālaḡoa
 'They called this place Mālaḡoa.' (T 11:46)

The basic phrase is *eu soso e asa*, including both the object and the ablative. Here, as in some other sentences in which the verbal base and the object (here, the ablative) are separated, *ki* is added, even though the verb used does not normally require an object marker. This solution is unwieldy, but it seems preferable to including *ki*, name marker, in the small list of prepositions.

3.7 Singulary transformations

3.7.1 Optional permutation

In the verb phrase, the order of the particles *ko* imperfective and *too* progressive can be reversed.

The order of the demonstratives and *seara* 'some' can be reversed. The following are possible:

<i>na-ataḡoli</i>	<i>maaga</i>	<i>waia</i>	<i>seara</i>	
person	pl.	this	some	'some of these men'
<i>na-ataḡoli</i>	<i>maaga</i>	<i>seara</i>	<i>waia</i>	
person	pl.	some	this	

3.7.2 Question transformations

A change in intonation alone may change a statement to a question. Specifically, the change is from intonation pattern (4) to pattern (2), discussed in §1.1.

Kite at the end of a sentence with a statement intonation changes it to a question. It is similar to tags in English like ". . .didn't he?" or ". . .isn't it?"

4. EVALUATION

Some of the weaknesses of the present study were referred to earlier; here they are discussed at greater length.

4.1 There still appear in the texts and citations some discrepancies in the transcription of so-called long vowels. It is generally agreed that a mixed phonetic-phonemic transcription is not a good thing, but for these forms, the transcription is just that. The following hypotheses and problems may play a part in finding the solution:

- (a) In slower speech, three-syllable forms appear to be favored at the end of an intonation. Forms like *masoso* 'today' never appear with a lengthened vowel on the antepenultimate syllable, but those like *toa* (*tooa* ?) 'fowl', *tua* (*tuua* ?) 'two', and *nae* (*naae* ?) 'he' vary.
- (b) Some reduplicated forms (e.g., *ṣosiwosi* 'work') never occur with a lengthened vowel; others (like *maromaaro* 'rest') do.
- (c) In the data gathered so far, there is a dearth of minimal pairs for long and short vowels.

- (d) In the treatment of intonation, no work has yet been done with stress. Since in many languages stress and vowel length co-occur, stress may have some bearing on the problem.
- (e) Within one intonation phrase, the point at which the pitch levels change cannot yet be predicted for all cases.
- (f) Although comparative evidence for descriptive work is inadmissible, there are some forms with a double vowel (like *vaatu* 'stone' and *maanu* 'bird') most cognates of which (at least, those known to me) have a single vowel.

4.2 Although I am fairly satisfied that [t̥] and [d̥] do not contrast, I would welcome more conclusive evidence.

4.3 The assignment of certain forms in verb phrases to either nucleus or periphery was not certain. For example, *lua* 'vomit', also 'outward', has wavered on the border but is at present considered a nucleus. For the most part, the criterion stated at the beginning of §2.1.7 was adhered to, but some forms had to be treated as "irregularities." Is *lua* 'vomit, spit out' the same morpheme as *lua* 'outward direction'? If so, then its occurrence as a directional is the result of a transformation. *Paa* (an intensifier, as in *e ẽia paa* 'It was very good') presented a similar problem. It was excluded as a particle by comparing

it with *liu* 'very', which also occurs as a nucleus, although *paa* itself never does. Therefore, it is considered as a nucleus with limited distribution, occurring in attributive transformations, but not in basic verb phrases. These limitations of distribution will have to be explained in the dictionary.

Midway in the second field trip, some attempts were made to write ordered rules that would generate kernel phrases. My impression at that time was that it was an exercise in symbol manipulation and that the results would be an inconvenience to the reader. Now, I am not entirely convinced that this was wrong, but such an approach would have shown much more clearly the immediate constituent structure of the basic phrase.

There is very little about the present treatment that is generative. If it has to be classified, it is closest to being an interpretive grammar. The test of its adequacy is how well it interprets sentences, and the texts have been provided as a corpus on which to make these tests. The following examples show the structure of some complicated sentences (but again, not the IC structure of the phrases themselves). In the examples, the numbers in parentheses follow the phrase or word that is the result of a transformation, and in the discussion that follows, these transformations are named and referred to by section number.

Go (1) *waina* (2) *eu too saisai sara p̃oogi* (3),
kusue (4) *nae* (5) *e taa pasa, maa* (6) *te kusu poo*
 (7) *loaloasi na-ru-na maaga* (8) 'And when they
 met every night, Rat didn't speak, but he leaned
 over and rubbed his hands.' (T 6:6)

Basic phrases

<i>eu</i>	<i>too</i>	<i>saisai</i>	<i>e</i>	<i>taa</i>	<i>pasa</i>
they	prog.	meet	he	not	speak
<i>sara</i>	<i>ṣoogi</i>		<i>te</i>	<i>kusu</i>	
every	night		he	lean-over	
<i>kusue</i>			<i>e</i>	<i>too</i>	<i>loaloasi</i>
rat			he	prog.	rub
					<i>ra</i>
					them
<i>nae</i>			<i>na-ru-na</i>	<i>maaga</i>	
he			hand-his	pl.	

Transformations

- (1) Conjunction 3.1.2.
- (2) Attribution 3.2.2.2. The whole phrase introduced by *waina* 'that, which' modifies the next verb phrase.
- (3) Attribution 3.2.2.2. *Sara ṣoogi* is a time phrase modifying the previous verb phrase.
- (4), (5) Apposition 3.6.1. Both *kusue* 'rat' and *nae* 'he' are in apposition to the following verbal-pronoun marker, *e*.
- (6) Conjunction 3.1.2.
- (7) Conjunction 3.1.2. *Poo* is the conjunction that links verb phrases with the deletion of the second and successive verbal-pronoun markers.
- (8) Apposition 3.6.3. *Na-ru-na maaga* 'his hands' is in apposition to the object in the preceding verb phrase.

Go (1) *e pei kusue* (2) *waina* (3) *e atulake*
paaṣai (4) *na-maloku* (5), *go* (6) *e pai* (7) *ragi*
wanogoe (8) *e too pei tea* (9) *munu-gi-ana* (10)
tapala nogoe (11) *paapaa* (12) *pa-ki na-aleati-a*
(13) *maaga waia* (14) 'And it was Rat who first
discovered Kava, and from that time it has been
drunk like that, until these times.' (T 6:98)

Basic phrases

<i>e pei nae</i> it be he	<i>wanogoe</i> before-mentioned
<i>kusue</i> rat	<i>e too pei nae</i> it prog. be it
<i>e atulake asa</i> he begin it	<i>tea</i> one
<i>e paaṣai a</i> he find it	<i>e munu-gi a</i> he drink it
<i>na-maloku</i> kava	<i>e tapala asa</i> it like it
<i>e pae asa</i> it from it	<i>nogoe</i> before-mentioned
<i>ragi</i> time	<i>e pa-ki asa</i> it go-to it
<i>e aleati</i> it day	

Transformations

- (1) Conjunction 3.1.2.
- (2) Apposition 3.6.2. *Kusue* 'rat' replaces *nae* 'he'.
- (3) Attribution 3.2.1.2.2. The phrase introduced by *waina*, here translated as 'who', modifies *kusue*.

- (4) Apposition 3.6.4. Here, the basic phrase, of which *paaṣai* is the nucleus, replaces the ablative in *e atulake asa*.
- (5) Apposition 3.6.3. *Na-maloku* is in apposition to the object, *a*.
- (6) Conjunction 3.1.2.
- (7) Attribution 3.2.2.2. The *pae* phrase modifies the following phrase, the nucleus of which is *pei* 'be'.
- (8) Apposition 3.6.4. *Ragi wanogoe* replaces the ablative *asa* in the basic phrase. The construction itself is an example of compounding, discussed in §3.3.1.
- (9) Apposition 3.6.2. The phrase introduced by *tea* replaces *nae*.
- (10) Participialization 3.4.
- (11) Apposition 3.6.4. *Nogoe* replaces the ablative. The longer phrase, *tapala nogoe*, serves as an attribute to the preceding phrase.
- (12) Attribution 3.2.2.2. *Paapaa* introduces the attributive phrase.
- (13) Nominalization 3.5.2. From the basic phrase, *e aleati*, a noun phrase is made, which then serves as appositive to the ablative in *e pa-ki asa* (14). The noun phrase, of which *na-aleati-a* is the nucleus, is also the result of another transformation, compounding, discussed in §3.3.1.

NOTES

¹A full discussion of the problem of consonant alternation appears as Schütz 1968.

²Some of the problems of long vs. short vowels may be resolved as work on the dictionary continues. For this project, the technique described in Carroll 1966 is being used.

³Unofficial population statistics for Nguna were supplied by Marnie Anderson, Australian National University.

⁴Capell 1962.

⁵Don 1927:87.

⁶Don 1927:224.

⁷Codrington 1885:476-7.

⁸Ibid., p. 471.

⁹Ibid., p. 471n.

¹⁰Ray 1926, Introduction.

¹¹Macdonald 1894.

¹²Miller 1948?.

¹³Capell 1962:217.

¹⁴I think the preceding analysis holds for the data examined, but the treatment is, of course, too limited. A couple of vexing problems remain. One is the possibility of stress having some importance in the phrase; the other is my inability to predict, for some phrases, where the phrase-ending change of pitch will occur.

¹⁵A. Haudricourt (personal communication, 7 August 1967) suggests that geminate vowels be considered two morae and one syllable. I find little fault with the suggestion, except that it sets up another unit (the mora) that is just as fictitious as the syllable.

¹⁶A complete phonemic analysis of the Tongoa system has not been done, but because of the structural pressure of the nonsuspicious syllable types, [nd] has been interpreted as a unit phoneme.

¹⁷Ray 1926:204. It is not clear whether Ray meant "in the environment of *r*," although there is some evidence that the latter is the right interpretation. Mrs. Murray said that she occasionally heard a *dr*-like pronunciation of /t/, and the following written evidence would support this. In an early translation of the Lord's Prayer, these forms appear:

matroko. The present form is *matoko* (with [d]) 'stay'.

tro. Now, *too* progressive.

trakiusia. Now, *takiusi* a 'after it' (Steel 1880:469).

This brings us to Capell's description of /t/ as a retroflex (Capell 1962:220), which would be very likely to have been interpreted as *tr* or *dr*. How Capell heard it is another problem, since it seems to be a rare pronunciation.

Some of the earliest printed material available for Nguna shows how the orthography has changed. In an 1882 translation (The Gospels according to Matthew and John. London: British and Foreign Bible Society) only *t*, and not *d*, is used, although by this time *ṭ* and *ṁ* are recognized. But by at least 1891, *d* was written. This is only a guess, but it may be that *d* was written partly to make the system more acceptable for Tongoa, since both languages were served by the same translations.

¹⁸Ray 1926:204.

¹⁹Don 1927:224.

²⁰Voegelin and Voegelin 1964:56. The reason for interpretations like this might have been clearer if the authors had chosen to name the sources for their information.

²¹Capell 1962:219.

²²Don 1927:224.

²³Ray 1926:204.

²⁴Voegelin and Voegelin 1964:56.

²⁵These markers are so-named because they not only mark the verb phrase, but contrast among themselves for person, number, and inclusion.

²⁶Some reduplicated forms have a double vowel in the base and a single vowel in the prefix, or vice versa. The patterning has not yet been explained.

²⁷There is a base *tali*, which means 'to circle'. It is not likely that this is the same morpheme. The base **vusu* has not been found.

²⁸Ray 1926:211.

²⁹Buse 1960:131.

³⁰Ray 1926:218.

³¹Ray 1926:218.

³²The affinity of *na. . .ana* to *na-* and *-ana* is obvious, but it seemed simpler to consider nominalization a separate process rather than a combination of two.

BIBLIOGRAPHY

- Biggs, Bruce G. 1961. The structure of New Zealand Maori. *Anthropological Linguistics* 3:1-52.
- Buse, J. E. 1960. Rarotongan personal pronouns: form and distribution. *Bulletin of the School of Oriental and African Studies* 23:123-37.
- Capell, A. 1962. A linguistic survey of the south-western Pacific. South Pacific Commission Technical Paper No. 136. Noumea: South Pacific Commission.
- Carroll, Vern. 1965. An outline of the structure of the language of Nukuoro. *Journal of the Polynesian Society* 74(2):192-226.
- _____. 1966. Generative elicitation techniques in Polynesian lexicography. *Oceanic Linguistics* 5(2):59-70.
- Codrington, R. H. 1885. *The Melanesian languages*. Oxford: Clarendon Press.
- Don, Alexander. 1927. *Peter Milne of Nguna*. Dunedin: Foreign Missions Committee, P. C. N. Z.
- Macdonald, D. 1894. *The Asiatic origin of the Oceanic languages: etymological dictionary of the language of Efate (New Hebrides)*. Melbourne: Melville and Co.
- Miller, Graham. 1948? *Tongan grammar*. Typescript.
- Nalegaana Maga ni Nalotuana (Hymns of the Church). Christchurch: Presbyterian Bookroom.
- Ray, Sidney H. 1926. *A comparative study of the Melanesian Island languages*. Cambridge: At the University Press.

Schütz, Albert J. 1968. A pattern of morphophonemic alternation in Nguna, New Hebrides. Papers in Linguistics of Melanesia No. 1. Canberra: The Australian National University.

_____. 1969. Nguna texts: a collection of traditional and modern narratives from the Central New Hebrides. Oceanic Linguistics Special Publication No. 4. Honolulu: University of Hawaii Press.

Steel, Robert. 1880. The New Hebrides and Christian missions. London: J. Nisbet & Co.

Voegelin, Carl F., and Florence M. Voegelin. 1964. Sample of sound systems in Melanesian. Anthropological Linguistics 6(9):34-68.